

Category (科目区分)	Cluster of Biofunctional Systems		
Course Title (授業科目名)	Biological regulation in surgical field		
Instructors (担当者名)	Junichi Arita	Academic Year (配当年次)	1,2
Required course / Elective Course (必修/選択)	Elective Course	Credits (単位数)	1 credit
Class Format (授業形態)	Lecture, exercise		
Schedule (開講期間)	Contact about the proposed date by e-mail		
Class Date/Period (開講曜日・時間)	Every Thursday, 18:00 – 20:00		
Course Outline/ Course Objectives (授業の概要・到達目標)			
The aim of this course: Understand about surgical indication and biological regulation in response to surgery. Course Outline: Describe organ damage during surgery and postoperative complications. Course Objectives:			
1. Understand the types of gastrectomy and complications in relation to the methods of reconstruction.			
2. Understand the types of colectomy and complications in colorectal surgery.			
3. Understand the impact of resected liver volume on postoperative liver failure. Learn how to diagnose liver function.			
4. Understand the basic knowledge of anatomical liver resection.			
5. Understand the long-term outcomes and quality of life following biliary reconstruction.			
6. Understand the long-term outcomes and quality of life following pancreaticoduodenectomy.			
7. Learn the effects of infections on postoperative complications and prognosis.			
8. Learn the effects of cancer recurrence on biological regulation.			
9. Understand contribution of radiological imaging on deciding types of surgery.			
Course Planning (授業計画)			
	Course Outline/ Course Objectives (授業の概要及び到達目標) (Contents of Class) (授業内容)	Instructor (担当教員名)	Department (講座名) Class Room [実施場所]
1	Gastrectomy: Indications and postoperative complications	Junichi Arita	Gastroenterological Surgery [conference room at 1-6 ward]
2	Colectomy: Indications and postoperative complications		
3	Hepatectomy: Indications and postoperative complications		
4	Liver vascular anatomy and safe limits for liver resection		
5	Biliary reconstruction: Technique and postoperative complications		
6	Pancreaticoduodenectomy: Postoperative complications		
7	Infectious complications of gastroenterological surgery		
8	Cancer recurrence and biological regulations		
9	Role of radiological imaging in management of gastrointestinal cancer		
10	Role of endoscopic imaging in management of gastrointestinal cancer		
Grading Criteria (成績評価の基準と方法)			
One credit is 45 hours in total, consisting of 20 hours of practical training in a lecture room (laboratory) and 25 hours of self-study training. Evaluation will be based on attendance, oral examinations and submitted reports.			
Contact Information (問い合わせ先(氏名, メールアドレス等))			
Name: Junichi Arita / E-mail: jarita@med.akita-u.ac.jp			
Comment (その他特記事項)			
Information about the course: If you are a working graduate student and cannot attend the practical training due to work, we will adjust the schedule. Textbooks and reference materials: Materials will be distributed as necessary. Content of study during self-study time: It is desirable to conduct preparatory study according to the objectives and class content.			